

DRAFT

William R. Logan

Conservation Area

Ten-Year Area Management Plan

FY 2016-2025



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OVERVIEW

- **Official Area Name:** William R. Logan Conservation Area, #6607
- **Year of Initial Acquisition:** 1968
- **Acreage:** 1,798 acres
- **County:** Lincoln
- **Division with Administrative Responsibility:** Wildlife
- **Division with Maintenance Responsibility:**
 - A. **Infrastructure Maintenance:** Design and Development
 - B. **General Area Maintenance:** Wildlife
- **Statements of Purpose:**
 - A. **Strategic Direction:** Manage for wildlife, woodland, and open land resources with emphasis on woodland and open land species and compatible outdoor recreational opportunities.
 - B. **Desired Future Condition:** The desired future condition of William R. Logan Conservation Area (Logan CA) is healthy forest and woodland natural communities and open land habitats blended together to form a diverse landscape for a variety of plants and animals representative of quality habitat management within the Cuivre River Hills Conservation Opportunity Area.
 - C. **Federal Aid Statement:**

This area, or a portion thereof, was acquired with Pittman-Robertson Wildlife Restoration funds to restore and manage wildlife, conserve and restore suitable wildlife habitat, and provide public access for hunting or other wildlife-oriented recreation.

GENERAL INFORMATION AND CONDITIONS

I. Special Considerations

- A. **Priority Areas:** Cuivre River Hills Conservation Opportunity Area, Cuivre River Fisheries Priority Watershed, Whiteside Quail Focus Area, Quail Emphasis Area (extension to the William G. and Erma Parke White Memorial Wildlife Area, on north end of Logan CA)
- B. **Natural Areas:** None
- C. **Land Type Association:** William R. Logan Conservation Area is described in the Cuivre River Woodland/Forest Hills Land Type Association of the Central Dissected Till Plains Section of Missouri. This land type possesses strongly rolling to relatively rugged hills with rather narrow ridges, steep sideslopes, narrow valleys, and over 200 feet of local relief. Upland soils are mainly thin layers of till and loess, while lower slopes grade into sedimentary residuum. Historically, this area consisted of a complex mosaic of narrow ridgetop prairies

and savannas, grading into oak woodlands on upper slopes, with well-developed oak and mixed hardwood forests on protected slopes and bottoms. Floodplains with marshes and wet prairies are interspersed throughout. Streams have mainly sand bed channels and well-developed floodplains of variable soil texture. Today, while much of the landscape has been cleared for pasture, the largest blocks of remaining timber in this region occur here. Most blocks are dense, second growth oak forest, fragmenting and simplifying a potentially diverse landscape (Nigh & Schroeder, 2002).

II. Important Natural Features and Resources

A. Species of Conservation Concern: Species of conservation concern are known from this area. Area Managers should consult the Natural Heritage Database annually and review all management activities with the Natural History Biologist.

B. Caves: None

C. Springs: None

III. Existing Infrastructure

- 10 parking lots
- 1 hike/bike multi-use trail (4.2 miles, natural surface)
- 1 rifle shooting range, Americans with Disabilities Act (ADA) accessible
- 1 shotgun shooting range
- 2 primitive campgrounds (with parking pads, privies and fire pits)
- 2 privies
- 1 radio tower
- 7 fishing ponds (29.0 acres) and dams
- 13 fishless ponds (4.0 acres)

IV. Area Restrictions or Limitations

A. Deed Restrictions: None

B. Federal Interest: Uses of land acquired with federal funds may not interfere with the purpose for which it was acquired. Federal funds may also be used in the management of this land. Fish and wildlife agencies may not allow recreational activities and related facilities that would interfere with the purpose for which the State is managing the land. Other uses may be acceptable and must be assessed in each specific situation.

C. Easements: BP pipeline, MoGAS pipeline, Cuivre River Electrical Coop utility line (Figure 6)

D. Cultural Resources Findings: Yes, records kept with Missouri Department of Conservation (Department) Environmental Compliance Specialist. Managers

should follow Best Management Practices for Cultural Resources found in the Department Resource Policy Manual.

E. Hazards and Hazardous Materials: None observed

F. Endangered Species: None observed

G. Boundary Issues: None

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

Logan CA contains 1,418 wooded acres and 350 acres of old field and open lands. Past management focused on providing suitable habitat for wildlife through tree, shrub, and native grass plantings. Recent management has focused on reducing woody invasive plants in open land and wooded areas, conducting prescribed burns, reducing exotic broadleaf plants in grassland areas, planting food plots, and rotating agricultural crops.

Logan CA lies within the Cuivre River Hills Conservation Opportunity Area, an area where the ecology of the southern Missouri Ozarks mixes with the plains of northern Missouri. Many plants and animals important to conservation occur in this distinctive landscape. Any opportunity to enhance natural communities should be explored.

Management efforts should replicate natural disturbance with special attention given to prescribed burning, invasive woody species reduction and exotic species reduction. The agricultural crop program should be utilized to diversify food and cover sources for wildlife, control exotic plant species, and maintain open land habitat.

Challenges and Opportunities:

- 1) Manage exotic species.
- 2) Enhance woodland/forest.
- 3) Enhance open land.
- 4) Manage quail and small game.
- 5) Where there is interest, partner with private landowners to manage private lands benefiting a variety of plants and animals representative of quality habitat within the Cuivre River Hills Conservation Opportunity Area and Whiteside Quail Focus Area.

Management Objective 1: Manage exotic species.

Strategy 1: Identify areas where fescue, sericea lespedeza, bush honeysuckle, autumn olive, and other exotic species occur and use proven treatment methods to reduce their occurrence. (Wildlife)

Management Objective 2: Enhance wooded areas.

Strategy 1: Identify areas suitable for woodland restoration and manage these areas with woodland thinning, prescribed burning, commercial harvest and other techniques to enhance woodland natural communities and associated wildlife. (Wildlife, Forestry)

Strategy 2: If prescribed burning is not feasible, wooded areas may be managed with forest stand improvement or other techniques to enhance habitat for wildlife. (Wildlife, Forestry)

Management Objective 3: Maintain open land.

Strategy 1: Manage open land in current condition with mechanical and chemical disturbance, native vegetation establishment, food plot establishment, and prescribed fire to maintain habitat for open land wildlife. (Wildlife)

Management Objective 4: Manage quail and small game.

Strategy 1: Identify areas suitable to sustaining quail and small game populations. Utilize proven habitat management techniques to enhance these habitats. (Wildlife)

Strategy 2: Conduct spring quail and grassland bird surveys annually between May 1 and July 15. (Wildlife)

Strategy 3: Conduct fall quail covey counts annually between Oct. 1 and Oct. 31. (Wildlife)

Management Objective 5: Where there is interest, partner with private landowners to manage private lands for a variety of plants and animals representative of quality habitat within the Cuivre River Hills Conservation Opportunity Area and Whiteside Quail Focus Area.

Strategy 1: Identify landowners within the Cuivre River Hills Conservation Areas and Quail Focus Area willing to enhance open lands, woodlands, edges, and streamside habitats. (Private Land Services)

Strategy 2: Utilize cost share options to help landowners achieve habitat management goals. (Private Land Services)

VI. Aquatic Resource Management Considerations

Challenges and Opportunities:

- 1) Protect stream corridors.
- 2) Maintain quality fishing in area ponds.

Management Objective 1: Protect stream corridors.

Strategy 1: Maintain a 100-foot buffer adjacent to Mill Creek and at least a 50-foot buffer adjacent to other tributaries. (Wildlife)

Strategy 2: Continue to follow best management practices to ensure consideration is given to streams when management activities are conducted. (Wildlife)

Management Objective 2: Maintain quality fishing in the area's seven fishing ponds.

Strategy 1: Conduct occasional electrofishing surveys in each pond to ensure fish communities are balanced. (Fisheries)

Strategy 2: Control aquatic vegetation in ponds using herbicide and/or introducing grass carp, as needed. (Fisheries)

Strategy 3: Stock channel catfish in each of the ponds as needed. (Fisheries).

Strategy 4: Maintain fishing access, adequate numbers of harvested fish, and proper community balance using herbicide application and brush cutting. (Fisheries)

Strategy 5: Propose lake renovation, as needed, to improve fishing. Lake #1 was recently renovated and reopened to fishing. (Fisheries)

Strategy 6: Plant beneficial vegetation to improve fish habitat. This was conducted in Lake #1, for example, after renovation. (Fisheries)

VII. Public Use Management Considerations

Challenges and Opportunities:

- 1) Provide hunting, trapping, fishing, and wildlife viewing opportunities for the public.
- 2) Maintain hiking and biking trail to provide high-quality opportunities for area users.
- 3) Maintain positive relationships with adjacent landowners.
- 4) Maintain shooting ranges to provide high-quality shooting opportunities for area users.

Management Objective 1: Provide hunting, trapping, fishing, and wildlife viewing opportunities for the public.

Strategy 1: Continue to enhance woodland, open land, edge, and aquatic habitats to increase fish and wildlife populations on the area. (Wildlife, Forestry, Fisheries)

Strategy 2: Plant and manipulate food plots for mourning dove management to provide quality opportunities for dove hunting. (Wildlife)

Strategy 3: Maintain trails and dams around lakes on alternating months during the growing season to provide access to anglers. (Wildlife)

Management Objective 2: Maintain hiking and biking trail to provide high-quality opportunities for area users.

Strategy 1: Maintain trail by mowing at least once a month during the growing season, with monthly inspections for debris and hazards throughout the year. (Wildlife)

Management Objective 3: Maintain positive relationships with adjacent landowners.

Strategy 1: Maintain signage in a way that clearly designates Department property boundaries. (Wildlife)

Strategy 2: Respond quickly and effectively to neighboring landowner questions, comments, and concerns. (Wildlife)

Management Objective 4: Maintain shooting ranges to provide high-quality shooting opportunities for area users.

Strategy 1: Inspect, clean, and repair infrastructure on both ranges on a weekly basis. (Wildlife)

Strategy 2: Inspect and repair range safety fence and signage twice per year. (Wildlife)

Strategy 3: Coordinate enforcement with local Conservation Agents to ensure compliance with range rules and deter vandalism. (Wildlife)

VIII. Administrative Considerations

Challenges and Opportunities:

- 1) Maintain area infrastructure at current levels.
- 2) Acquisition of land.

Management Objective 1: Maintain area infrastructure at current levels.

Strategy 1: Maintain area infrastructure in accordance with Department guidelines. (Design & Development)

Lands Proposed for Acquisition:

When available, adjacent land may be considered for acquisition from willing sellers. Tracts that improve area access, provide public use opportunities, contain unique natural communities and/or species of conservation concern, are located within a priority geography, or meet other Department priorities, as identified in the annual Department land acquisition priorities, may be considered.

MANAGEMENT TIMETABLE

Strategies are considered ongoing unless listed in the following table:

	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Aquatic Resource Management										
<i>Objective 2</i>										
Strategy 1	X			X			X			

APPENDICES

Area Background:

William R. Logan Conservation Area is comprised of two tracts located in northern Lincoln County and totals 1,798 acres. This area includes 1,418 acres of woods, 350 acres of old fields and open lands, and 29 acres divided between seven ponds. The area was purchased from William R. Logan in 1968 in part with Pittman-Robertson Wildlife Restoration funds. Management of the William R. Logan Conservation Area focuses on providing food and cover for wildlife while providing outdoor recreational opportunities for the public.

Current Land and Water Types:

Land/Water Type	Acres	Miles	% of Area
Woodland	1,418		79
Old Fields	163		9
Ponds	29		2
Gravel Infrastructure	1		<1
Open Land	187		10
Total	1,798		100
Stream Frontage		6.8	

References:

Nigh, T. A., & Schroeder, W. A. (2002). *Atlas of Missouri ecoregions*. Missouri: Missouri Department of Conservation.

Maps:

Figure 1: Area Map

Figure 2: Aerial Map

Figure 3: Current Cover Type Map

Figure 4: Logan Priority Areas Overview

Figure 5: Topographic Map

Figure 6: Easement Map

Figure 1: Area Map

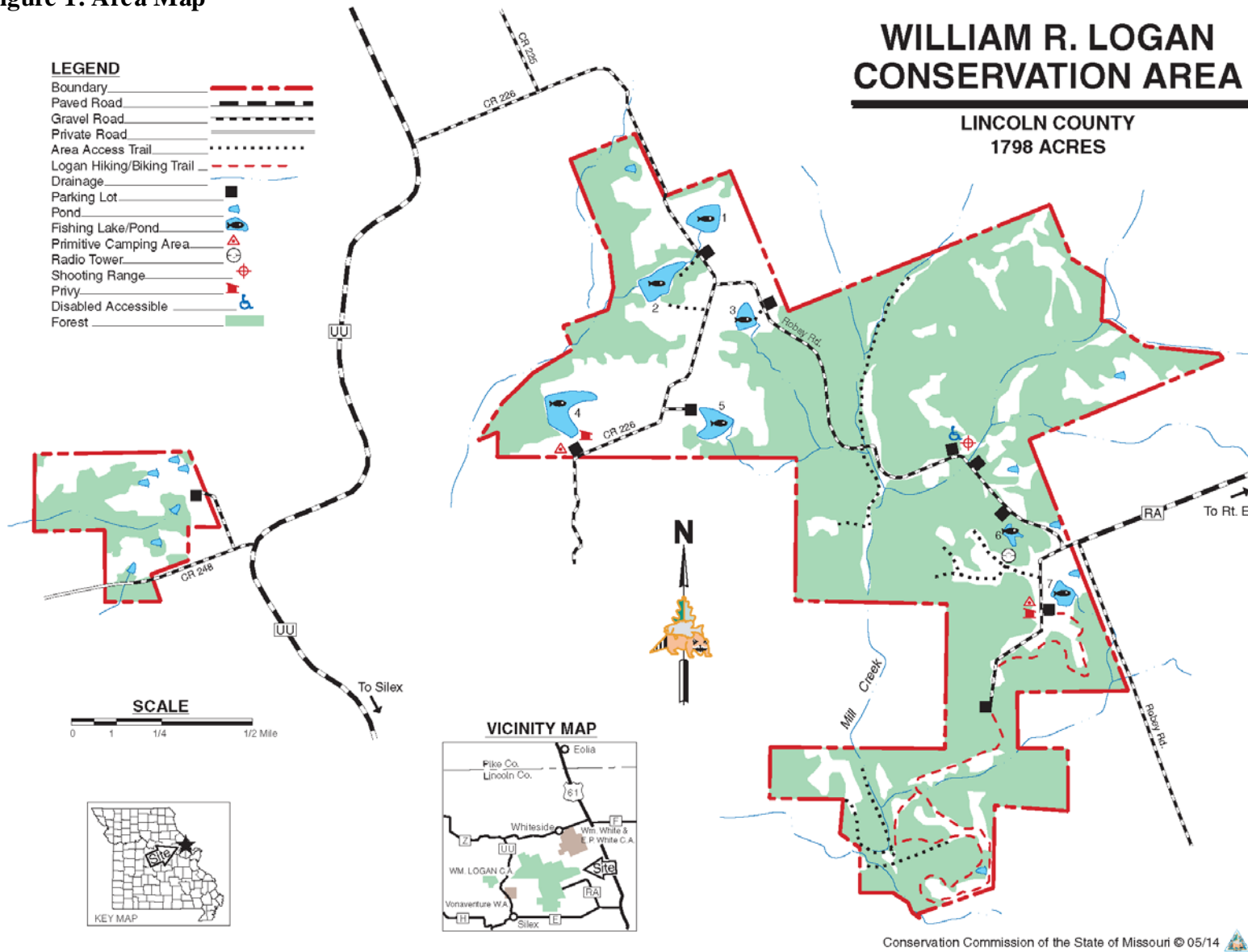


Figure 2: Aerial Map

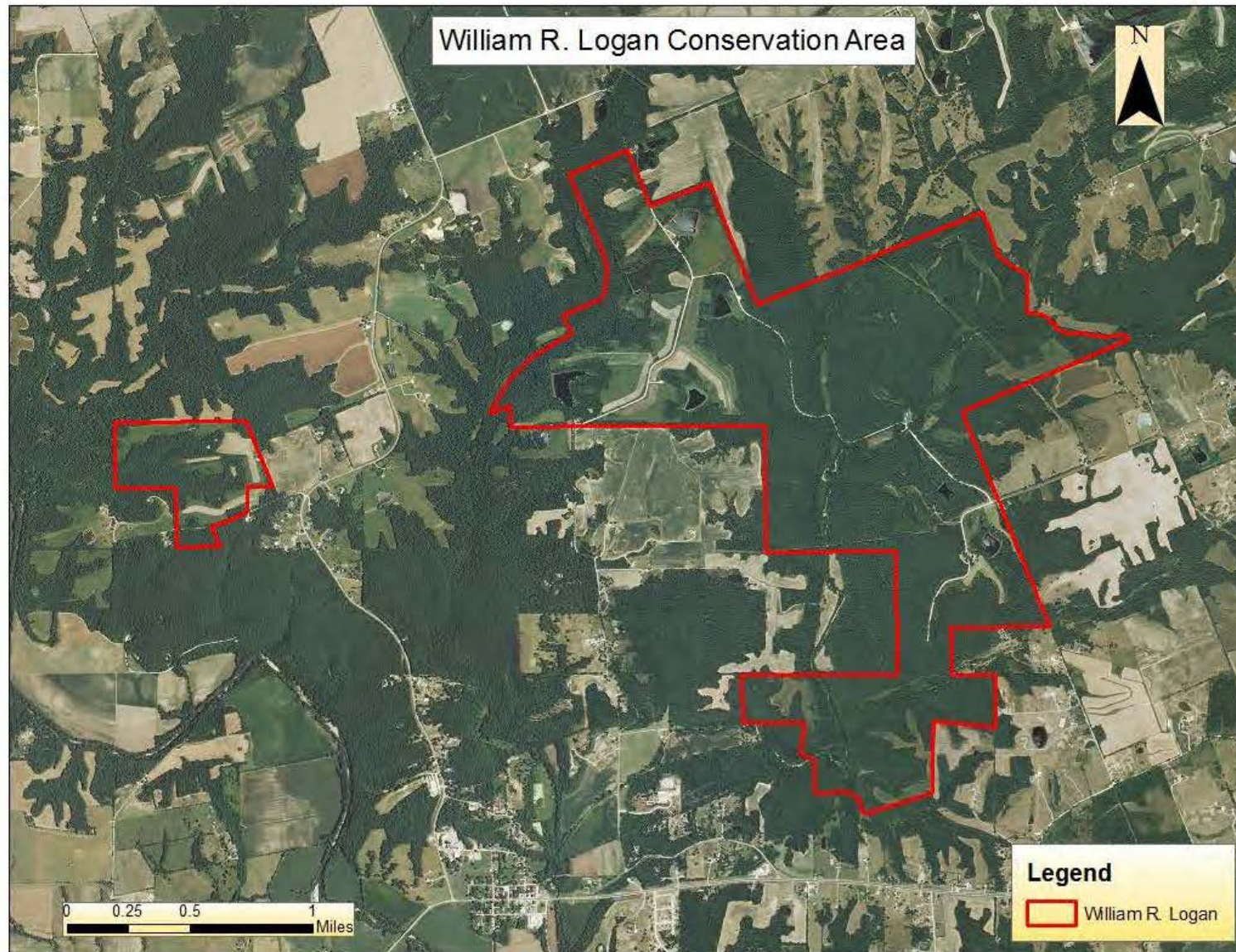


Figure 3: Current Cover Type Map

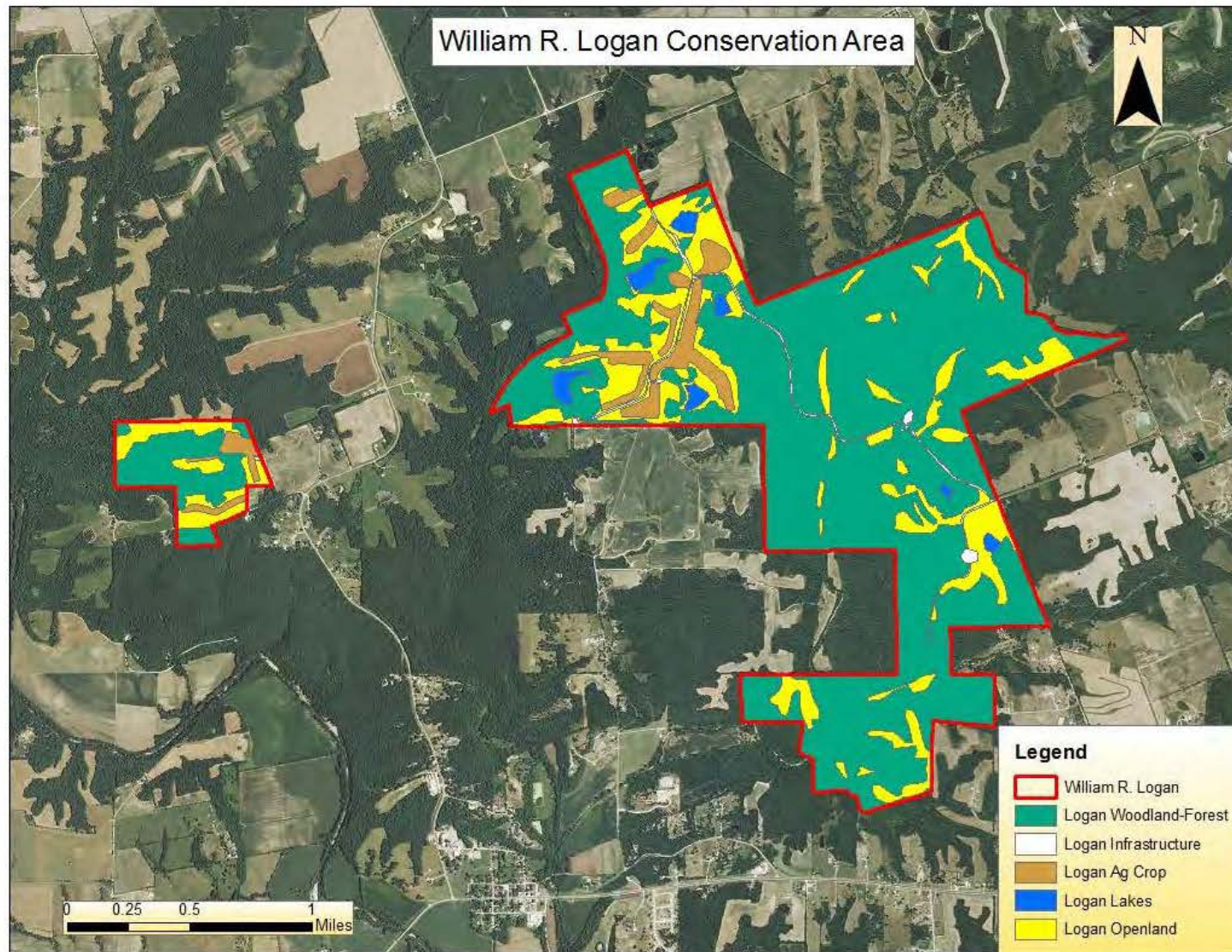


Figure 4: Logan Priority Areas Overview

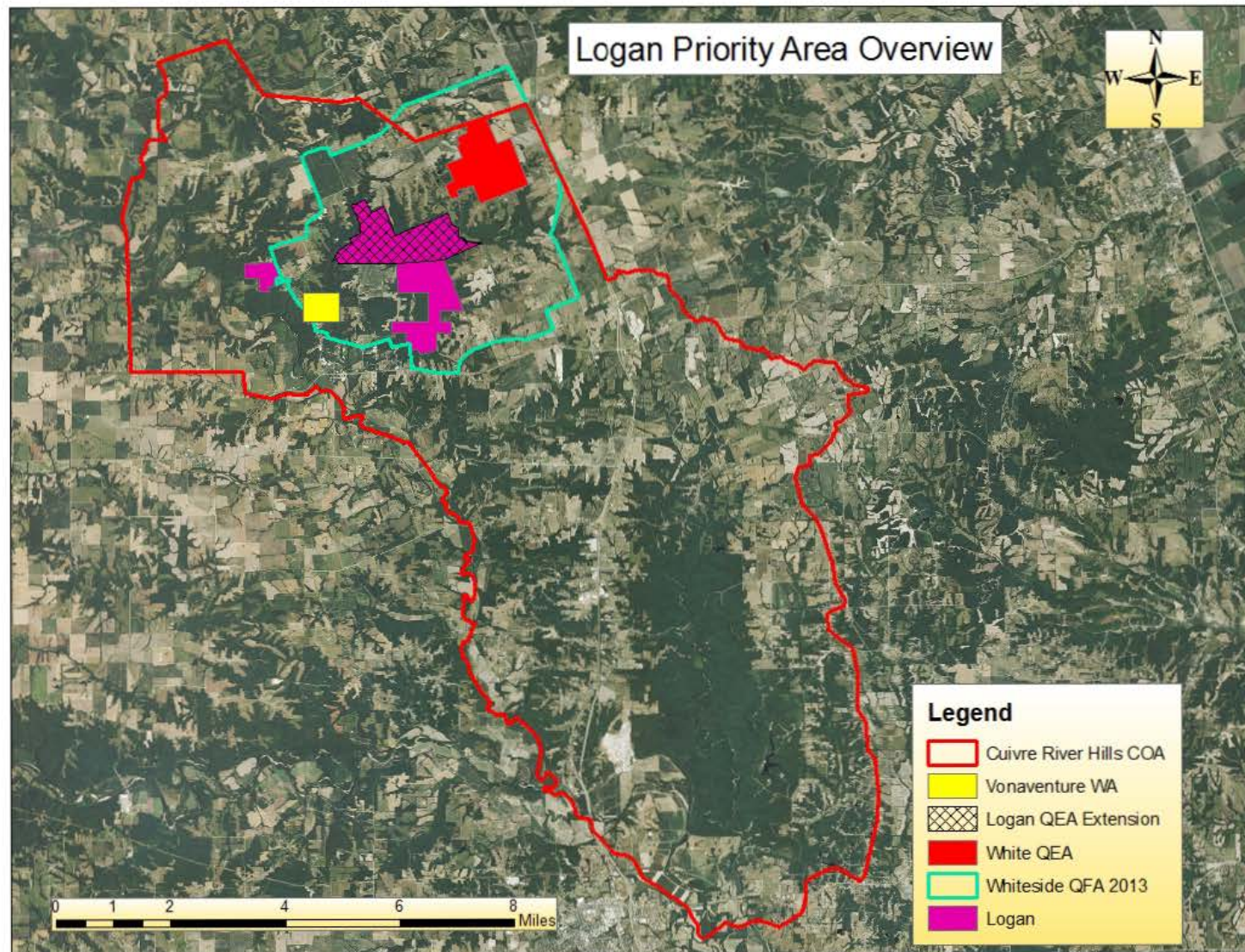


Figure 5: Topographic Map

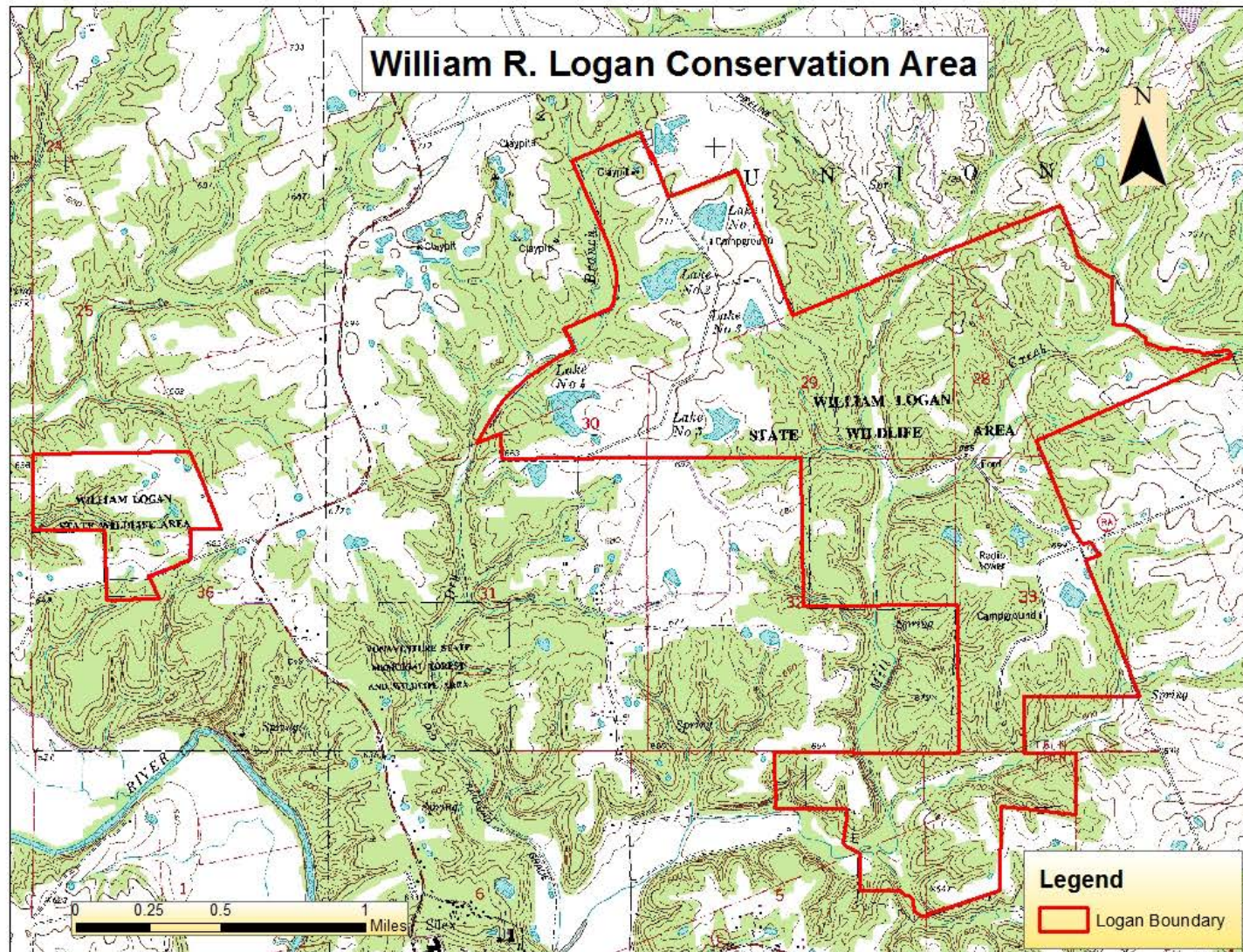
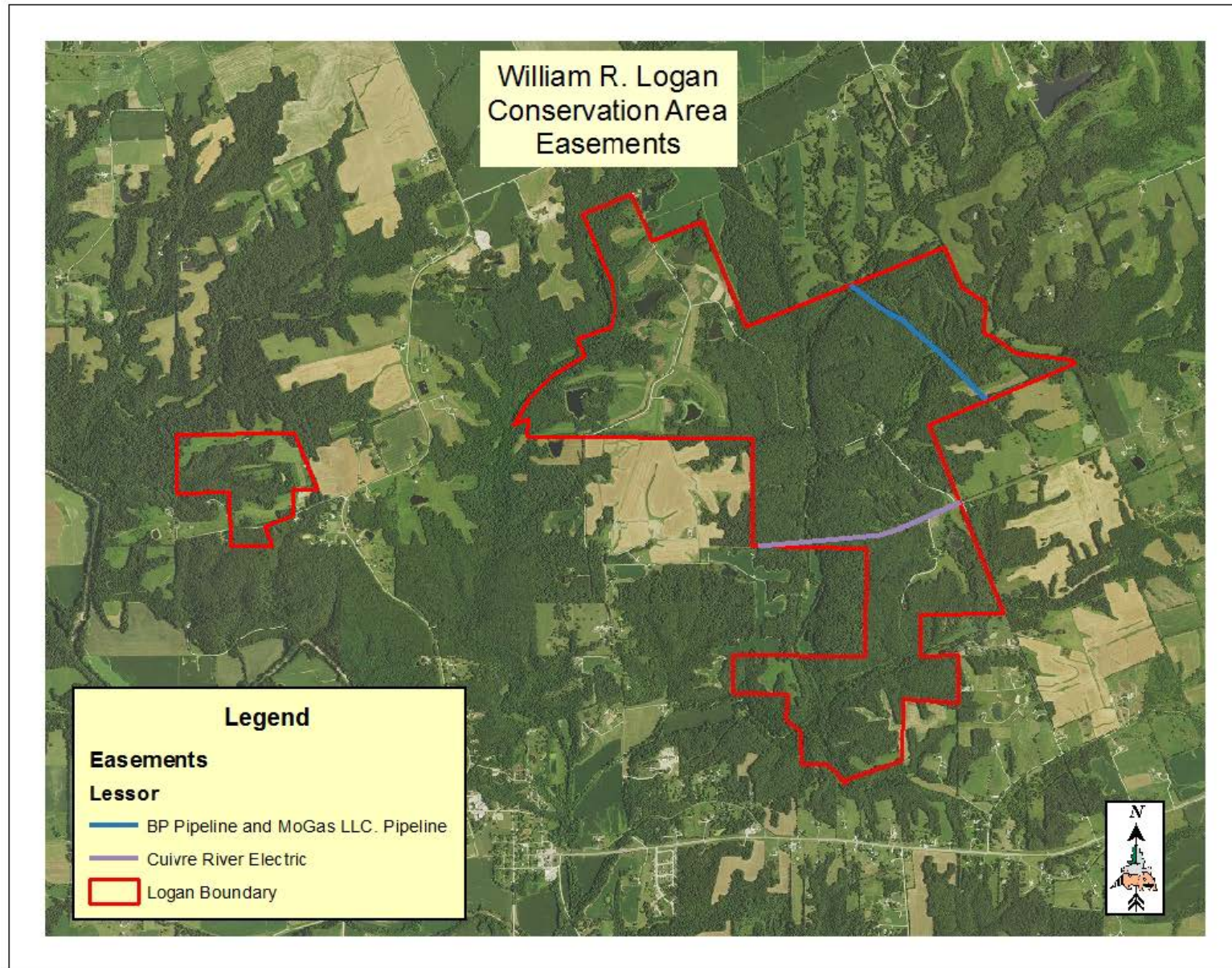


Figure 6: Easement Map



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